



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,230	11/19/2003	Ronald W. Hall	10971833-3	6942

7590 05/02/2006

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P. O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

LIANG, LEONARD S

ART UNIT	PAPER NUMBER
----------	--------------

2853

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/717,230

Applicant(s)

HALL ET AL.

Examiner

Leonard S. Liang

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2005 and 26 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-23 and 25-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-23 and 25-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Specification and Drawings

The lengthy specification and drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification and drawings. Specifically, the applicant is required to match all references in the drawings to the references in the specification. Once the applicant has done so, the examiner will approve the specification and drawings.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19-23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt et al (US Pat 5732751) in view of Powers et al (US Pat 6139138).

Schmidt et al discloses:

- {claim 19} A method of providing ink to a printing system (abstract), the printing system including a docking bay having therein a first fluid inlet for receiving pressurized ink (figure 2; figure 2, reference 42); inserting a pump module into the docking bay of the printing system to couple the pump module to the first fluid inlet (figure 2; through fluid outlet 28; figure 2, reference 26 shows pump);

Art Unit: 2853

the pump module including a second fluid inlet for receiving ink (figure 3, reference 60); a pressurizing apparatus for increasing the fluid pressure of the ink before providing the ink to the first fluid inlet (figure 3, reference 26); coupling an ink container to the second fluid inlet (figure 3, reference 24)

- {claim 20} pump actuator and actuating the pump actuator to move linearly to engage the pressurizing apparatus to provide pressurized ink at the first fluid inlet (figure 2, reference 40)
- {claim 21} wherein the pressurizing apparatus includes a variable volume chamber having a chamber volume and wherein the step of actuating the pump actuator includes: increasing the chamber volume to draw ink into the variable volume chamber from the ink container; and decreasing the chamber volume to expel pressurized ink from the variable volume chamber through the first fluid inlet of the pump module (column 4, lines 16-34)
- {claim 23} removing a protective cap on the ink container to expose a fill port for filling the ink container with an initial quantity of ink; removing a plug from the fill port; refilling the ink container with a quantity of refill ink; and inserting a plug into the fill port to prevent refill ink leakage from the ink container (column 3, lines 13-20)
- {claim 25} wherein the pump module includes keying features and the docking bay includes corresponding keying features, and wherein the step of inserting the pump module into the docking bay includes: engaging the keying features of the pump module with the corresponding keying features of the docking bay to

Art Unit: 2853

ensure the pump module is properly oriented upon insertion of the pump module into the docking bay (figure 1, reference 116, 118; figure 2, reference 134; column 5, lines 43-48)

Schmidt et al differs from the claimed invention in that it does not disclose:

- {claim 19} an air purge apparatus; removing air trapped within the pump module using the air purge apparatus
- {claim 22} wherein the air purge apparatus includes a septum, and wherein the step of removing air trapped within the pump module includes: inserting a hollow member through the septum; and applying vacuum pressure to the hollow member to draw air trapped from the air purge apparatus

Powers et al discloses:

- {claim 19} an air purge apparatus; removing air trapped within the pump module using the air purge apparatus (abstract)
- {claim 22} wherein the air purge apparatus includes a septum, and wherein the step of removing air trapped within the pump module includes: inserting a hollow member through the septum; and applying vacuum pressure to the hollow member to draw air trapped from the air purge apparatus (column 4, lines 21-49)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Powers et al into the invention of Schmidt et al. The motivation for the skilled artisan in doing so is to gain the benefit of removing air and gas bubbles from an ink jet pen (column 1, lines 50-51).

Claims 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt et al (US Pat 5732751) in view of Powers et al (US Pat 6139138), as applied to claims 19 and 25 above, and further in view of Hall et al (US Pat 6322207).

Schmidt et al, as modified, differs from the claimed invention in that it does not disclose:

- {claims 26-27} wherein the pump module includes further keying features and the ink container includes corresponding keying features, and wherein the step of coupling the ink container to the second fluid inlet includes: engaging the corresponding keying features of the ink container with the further keying features of the pump module to prevent an incompatible ink container from being coupled to the second fluid inlet

Hall et al discloses:

- {claims 26-27} wherein the pump module includes further keying features and the ink container includes corresponding keying features, and wherein the step of coupling the ink container to the second fluid inlet includes: engaging the corresponding keying features of the ink container with the further keying features of the pump module to prevent an incompatible ink container from being coupled to the second fluid inlet (column 16, lines 3-24)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Hall et al into the invention of modified Schmidt et al. The motivation for the skilled artisan in doing so is to gain the benefit of making sure the proper ink container is attached to the pump, thus producing better print quality (column 16, lines 6-11).

Response to Arguments

Applicant's arguments filed 10/31/05 have been fully considered but they are not persuasive.

The examiner agrees with the applicant that the amendments to the claims render the examiner's previous double-patenting rejection moot. Therefore, the previous double-patenting rejection has been withdrawn.

The examiner also agrees that the amendments to the claims also overcome the rejection made in light of Kashio (US Pat 3950761).

However, the examiner disagrees with the applicant that the Schmidt et al reference is not prior art because the present application claims priority to U.S. Patent application serial number 08/566818, filed on December 4, 1995 and issued as U.S. Patent number 5900386 to Barinaga et al. The present application is a continuation of 10/000050, which was filed on 11/01/01. That application is a continuation in part of the 08/566818 application. In order for the present application to get the date of the 08/566818 application, that application must disclose the relevant parts of the currently claimed invention. Application 08/566818 does not do so. The applicant may be right that figures 1-17 of the present application are identical to figures 1-17 of the Barinaga et al. '896 patent. However, it does not appear that the Barinaga et al patent discloses figure 22 of the present application. Figure 22 was the figure elected by the applicant in the response to election/restriction filed on 06/15/05. Because this important figure is not shown in the Barinaga et al patent, the examiner does not grant the applicant priority to it. Rather, the earliest date that the applicant can get is the 11/01/01 date of 10/000050. The

Art Unit: 2853

applicant will appreciate that in light of this date, Schmidt et al is not a 102 (e) reference, but is rather a 102(b) reference. Therefore, it is still considered good art, and as shown above, forms the basis for a rejection over the currently claimed invention.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard S. Liang whose telephone number is (571) 272-2148. The examiner can normally be reached on 8:30-5 Monday-Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2853

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

04/29/06

lsl *LSL*


STEPHEN MEIER
SUPERVISORY PATENT EXAMINER